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NEWS
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        FEB 27
                 CA/CAplus enhanced with 1900-1906 U.S. patent records
        MAY 10
NEWS
         MAY 11
                 KOREAPAT updates resume
NEWS
                 Derwent World Patents Index to be reloaded and enhanced
         MAY 19
NEWS
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NEWS
         MAY 30
                 IPC 8 Rolled-up Core codes added to CA/CAplus and
      7
                 USPATFULL/USPAT2
         MAY 30
                 The F-Term thesaurus is now available in CA/CAplus
NEWS
      8
                 The first reclassification of IPC codes now complete in
NEWS
         JUN 02
      9
                 INPADOC
NEWS 10
         JUN 26
                 TULSA/TULSA2 reloaded and enhanced with new search and
                 and display fields
                 Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 11
         JUN 28
NEWS 12
         JUl 11
                 CHEMSAFE reloaded and enhanced
NEWS 13
         JUl 14
                 FSTA enhanced with Japanese patents
        JUl 19
                 Coverage of Research Disclosure reinstated in DWPI
NEWS 14
        AUG 09
                 INSPEC enhanced with 1898-1968 archive
NEWS 15
NEWS 16
        AUG 28
                 ADISCTI Reloaded and Enhanced
         AUG 30
                 CA(SM)/CAplus(SM) Austrian patent law changes
NEWS 17
NEWS 18
         SEP 11
                 CA/CAplus enhanced with more pre-1907 records
NEWS 19
         SEP 21
                 CA/CAplus fields enhanced with simultaneous left and right
                 truncation
NEWS 20
         SEP 25
                 CA(SM)/CAplus(SM) display of CA Lexicon enhanced
                 CAS REGISTRY (SM) no longer includes Concord 3D coordinates
NEWS 21
         SEP 25
                 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
NEWS 22
         SEP 25
NEWS 23
         SEP 28
                 CEABA-VTB classification code fields reloaded with new
                 classification scheme
         OCT 02
                 MARPAT(R) now updated daily
NEWS 24
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NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

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NEWS X25 X.25 communication option no longer available
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=> s akt or ? akt() oncogene? () protein? or akt () kinase () transform? () protein? ADDITIONAL CHARACTERS REQUIRED AFTER '?' FOR LEFT TRUNCATION Additional characters must follow the left truncation symbol in your search term. If your search term contains a punctuation mark before the truncation symbol and you are searching in a field that uses implied proximity, the system may interpret the truncation symbol as being at the beginning of a term. Implied proximity is used in search fields indexed as single words, for example, the Basic Index. To see which fields in the current file have left truncation, enter "HELP SFIELDS" at an arrow prompt (=>).

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SINCE FILE TOTAL
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FULL ESTIMATED COST

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=> s akt or ?akt () oncogene? () protein? or akt () kinase () transform? () protein?
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         12944 ?AKT
         35156 ONCOGENE?
       2277690 PROTEIN?
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         11149 AKT
            18 AKTS
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                 (AKT OR AKTS)
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         53395 KINASES
        282501 KINASE
                 (KINASE OR KINASES)
        640626 TRANSFORM?
       2277690 PROTEIN?
             O AKT (W) KINASE (W) TRANSFORM? (W) PROTEIN?
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               TRANSFORM? (W) PROTEIN?
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       1866618 INHIBIT?
           383 L1 (W) INHIBIT?
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         42708 CANCERS
        303633 CANCER
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Updated Search

=> d l4, ibib abs hitstr, 1-8

L4 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:350627 HCAPLUS

DOCUMENT NUMBER: 144:465166

TITLE: Akt Signaling and Cancer: Surviving but not

Moving On

AUTHOR(S): Toker, Alex; Yoeli-Lerner, Merav

CORPORATE SOURCE: Department of Pathology, Beth Israel Deaconess Medical

Center, Harvard Medical School, Boston, MA, USA

SOURCE: Cancer Research (2006), 66(8), 3963-3966

CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. The frequent deregulation of the phosphoinositide 3-kinase/Akt survival signaling pathway in cancer has prompted significant interest in blocking this pathway to treat cancer. Recently, however, two studies have shown that the Akt isoform Aktl limits the invasive migration of breast cancer cells. These studies suggest that Aktl may have a dual role in tumorigenesis, acting not only pro-oncogenically by suppressing apoptosis but also anti-oncogenically by suppressing invasion and metastasis. We discuss the possible implications of these findings for therapeutic development of Akt inhibitors to treat cancer.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2

2005:1349832 HCAPLUS

DOCUMENT NUMBER:

144:307393

TITLE:

Molecular strategies targeting the host component of

cancer to enhance tumor response to radiation

therapy

AUTHOR (S):

Kim, Dong Wook; Huamani, Jessica; Fu, Allie; Hallahan,

Dennis E.

CORPORATE SOURCE:

Department of Radiation Oncology, Vanderbilt Ingram

Cancer Center, Nashville, TN, USA

SOURCE:

International Journal of Radiation Oncology, Biology,

Physics (2005), Volume Date 2006, 64(1), 38-46

CODEN: IOBPD3; ISSN: 0360-3016

PUBLISHER:

Elsevier Inc.

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

AB A review. The tumor microenvironment, in particular, the tumor vasculature, as an important target for the cytotoxic effects of radiation therapy is an established paradigm for cancer therapy. The authors review the evidence that the phosphoinositide 3-kinase (PI3K)/Akt pathway is activated in endothelial cells exposed to ionizing radiation (IR) and is a mol. target for the development of novel radiation sensitizing agents. On the basis of this premise, several promising preclin. studies that targeted the inhibition of the PI3K/Akt activation as a potential method of sensitizing the tumor vasculature to the cytotoxic effects of IR have been conducted. An innovative strategy to guide cytotoxic therapy in tumors treated with radiation and PI3K/Akt inhibitors is presented. The evidence supports a need for further investigation of combined-modality therapy that involves radiation therapy and inhibitors of PI3K/Akt pathway as a promising strategy for improving the treatment of patients with cancer.

REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS

SOURCE:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1211155 HCAPLUS

DOCUMENT NUMBER: 144:16324

TITLE: The Akt/PKB pathway: molecular target for

cancer drug discovery

AUTHOR(S): Cheng, Jin Q.; Lindsley, Craig W.; Cheng, George Z.;

Yang, Hua; Nicosia, Santo V.

CORPORATE SOURCE: Departments of Pathology and Interdisciplinary

Oncology, H Lee Moffitt Cancer Center and Research Institute, University of South Florida College of

Medicine, Tampa, FL, 33612, USA Oncogene (2005), 24(50), 7482-7492

CODEN: ONCNES; ISSN: 0950-9232
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. The serine/threonine kinase Akt/PKB pathway presents an exciting new target for mol. therapeutics, as it functions as a cardinal nodal point for transducing extracellular (growth factor and insulin) and intracellular (receptor tyrosine kinases, Ras and Src) oncogenic signals. In addition, alterations of the Akt pathway have been detected in a number of human malignancies. Ectopic expression of Akt, especially constitutively activated Akt, is sufficient to induce oncogenic transformation of cells and tumor formation in transgenic mice as well as chemoresistance. Akt has a wide range of downstream targets that regulate tumor-associated cell processes such as cell growth, cell cycle progression, survival, migration, epithelial-mesenchymal transition and angiogenesis. Blockage of Akt signaling results in apoptosis and growth inhibition of tumor cells with elevated Akt. The observed dependence of certain tumors on Akt signaling for survival and growth has wide implications for cancer therapy, offering the potential for preferential tumor cell killing. the last several years, through combinatorial chemical, high-throughput and virtual screening, and traditional medicinal chemical, a number of inhibitors

of
the Akt pathway have been identified. This review focuses on ongoing
translational efforts to therapeutically target the Akt pathway.

REFERENCE COUNT:

THERE ARE 131 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

131

ACCESSION NUMBER: 2005:493934 HCAPLUS

DOCUMENT NUMBER: 143:242080

TITLE: Effects on cell viability

AUTHOR(S): Guzman, M.

CORPORATE SOURCE: Department of Biochemistry and Molecular Biology I,

School of Biology, Complutense University, Madrid,

28040, Spain

SOURCE: Handbook of Experimental Pharmacology (2005),

168 (Cannabinoids), 627-642 CODEN: HEPHD2; ISSN: 0171-2004

PUBLISHER: Springer GmbH

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Cannabinoids are known to control the cell survival/death decision, leading to different outcomes that depend on the nature of the target cell and its proliferative or differentiation status. Cannabinoids

induce growth arrest or apoptosis in a number of transformed cells in culture. They do so by modulating key cell signaling pathways involved in the control of tumor cell fate. The best-characterized example is cannabinoid-induced apoptosis of glioma cells, which occurs via sustained ceramide accumulation, extracellular signal-regulated kinase activation, and Akt inhibition. In addition, cannabinoid

administration inhibits the angiogenesis and slows the growth of different types of tumors in laboratory animals. By contrast, most of the exptl.

evidence

indicates that cannabinoids protect normal neurons and glial cells from apoptosis as induced by toxic insults such as glutamatergic overstimulation, ischemia, and oxidative damage. It is therefore very likely that cannabinoids regulate cell survival and cell death pathways differently in tumor and non-tumor cells. Regarding immune cells, cannabinoids affect proliferation and survival in a complex and still obscure manner that depends on the exptl. setting. The findings reviewed here might set the basis for the use of cannabinoids in the treatment of cancer and neurodegenerative diseases.

REFERENCE COUNT:

THERE ARE 87 CITED REFERENCES AVAILABLE FOR THIS 87 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:703858 HCAPLUS

DOCUMENT NUMBER:

141:184489

TITLE:

AKT: A potential target for thyroid cancer

AUTHOR(S):

Kada, Faiza; Saji, Motoyasu; Ringel, Matthew D. The Washington Hospital Center/MedStar Research

Institute, Washington, DC, USA

SOURCE:

Current Drug Targets: Immune, Endocrine and Metabolic

Disorders (2004), 4(3), 181-185 CODEN: CDTIBT; ISSN: 1568-0088

PUBLISHER:

Bentham Science Publishers Ltd.

DOCUMENT TYPE:

Journal; General Review

CORPORATE SOURCE:

English LANGUAGE:

Thyroid cancer is a heterogeneous disorder characterized by gene mutations that activate signaling pathways, and also by abnormalities in tumor suppressor genes and cell cycle proteins. Activation of the Akt/PKB signaling pathway appears to be an important event in thyroid tumorigenesis and, perhaps, in tumor progression too. Akt is activated in Cowden's syndrome through inactivation of PTEN, a neg. regulator of Akt. Cowden's syndrome is an autosomal dominant multiorgan hamartoma syndrome characterized by benign and malignant thyroid tumors, breast cancers, and colon cancers. In addition, the Akt pathway appears to be activated in a significant proportion of sporadic thyroid cancers through activation of growth factor pathways by thyroid oncogenes and/or receptor overexpression. Disruption of PI3-kinase activity pharmacol. or disruption of Akt signaling using dominant neg. cDNA expression have demonstrated salutary effects on several cancer models in vitro. Therefore, Akt represents an attractive target for pharmaceutical development for a variety of malignancies, including thyroid cancer.

REFERENCE COUNT:

THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS 72 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

2004:604067 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:199325

Hypothesis: cannabinoid therapy for the treatment of TITLE:

gliomas?

AUTHOR(S): Velasco, Guillermo; Galve-Roperh, Ismael; Sanchez,

Cristina; Blazquez, Cristina; Guzman, Manuel

CORPORATE SOURCE: School of Biology, Department of Biochemistry and

Molecular Biology I, Complutense University, Madrid,

28040, Spain

SOURCE: Neuropharmacology (2004), 47(3), 315-323

CODEN: NEPHBW; ISSN: 0028-3908

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Gliomas, in particular glioblastoma multiforme or grade IV astrocytoma, are the most frequent class of malignant primary brain tumors and one of the most aggressive forms of cancer. Current therapeutic strategies for the treatment of glioblastoma multiforme are usually ineffective or just palliative. During the last few years, several studies have shown that cannabinoids-the active components of the plant Cannabis sativa and their derivs.-slow the growth of different types of tumors, including gliomas, in laboratory animals. Cannabinoids induce apoptosis of glioma cells in culture via sustained ceramide accumulation, extracellular signal-regulated kinase activation and Akt inhibition. In addition, cannabinoid treatment inhibits angiogenesis of gliomas in vivo. Remarkably, cannabinoids kill glioma cells selectively and can protect non-transformed glial cells from death. These and other findings reviewed here might set the basis for a potential use of cannabinoids in the management of gliomas.

REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:506589 HCAPLUS

DOCUMENT NUMBER: 141:98885

TITLE: The development of phosphatidylinositol ether lipid

analogues as inhibitors of the serine/threonine

kinase, Akt

AUTHOR(S): Gills, Joell J.; Dennis, Phillip A.

CORPORATE SOURCE: NCI, Bethesda, MD, 20889, USA

SOURCE: Expert Opinion on Investigational Drugs (2004), 13(7),

787-797

CODEN: EOIDER; ISSN: 1354-3784

PUBLISHER: Ashley Publications Ltd. DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. The serine/threonine kinase Akt is a component of the phosphatidylinositol 3'-kinase/Akt signal transduction pathway that is activated by receptor tyrosine kinases, activated Ras and integrins. As Akt regulates many processes crucial to carcinogenesis, and Akt activation has been observed in human cancers, intense efforts are underway to develop Akt inhibitors as cancer therapeutics. Towards this aim, phosphatidylinositol ether lipid analogs (PIAs), which are structurally similar to the products of phosphatidylinositol 3'-kinase, have been synthesized. PIAs inhibit Akt translocation, phosphorylation and kinase activity. Furthermore, they selectively induce apoptosis in cancer cell lines that depend on Akt for survival. This review will trace the development of PIAs, cover the biol. activities of PIAs and discuss future steps and challenges in their development.

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN 2002:607171 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 138:162768 Targeting serine/threonine protein kinase B/Akt and TITLE: cell-cycle checkpoint kinases for treating cancer AUTHOR (S): Li, Qun; Zhu, Gui-Dong Cancer Research, Global Pharmaceutical Discovery, CORPORATE SOURCE: Abbott Laboratories, Abbott Park, IL, 60064-6101, USA SOURCE: Current Topics in Medicinal Chemistry (Hilversum, Netherlands) (2002), 2(9), 939-971 CODEN: CTMCCL; ISSN: 1568-0266 PUBLISHER: Bentham Science Publishers Ltd. DOCUMENT TYPE: Journal; General Review LANGUAGE: English A review. Over the past decade, protein kinases have emerged as a group of mol. targets with the potential to be "cancer-specific", allowing the selective targeting of cancer cells vs. normal cells. These selective anticancer drugs would eliminate the cytotoxic side effects that are associated with conventional cancer chemotherapy. This article will focus on two emerging and less-explored protein serine/threonine kinase targets: PKB/Akt and checkpoint kinase 1 (Chk1). Protein kinase B/Akts are a group of serine/threonine kinases that are overexpressed in a variety of human tumors. An Akt inhibitor would target the imbalance of pro-vs. anti-apoptosis regulation in cancerous as compared to healthy cells. Thus, a greater therapeutic window than conventional cytotoxic chemotherapy is expected. Cell-cycle checkpoints have become attractive targets since some of them, such as the G1/S checkpoint, are defective in most tumor cells. Inhibition of one or more of the remaining checkpoint(s) could make cancerous cells more sensitive than healthy cells toward DNA damaging agents or radiation therapy. Among the checkpoint kinases, Chk1 appears to be an attractive mol. target. Chk1 blocks the activation of the Cdc2-cyclin B kinase complex, and hence entry into mitosis, by disrupting the translocation of the phosphatase Cdc25C from the cytoplasm to the nucleus. A limited number of small mol. inhibitors in this emerging field and their mode of action will be reviewed. REFERENCE COUNT: THERE ARE 275 CITED REFERENCES AVAILABLE FOR 275 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT => d his (FILE 'HOME' ENTERED AT 17:51:52 ON 02 OCT 2006) FILE 'REGISTRY' ENTERED AT 17:52:01 ON 02 OCT 2006 FILE 'HCAPLUS' ENTERED AT 17:54:03 ON 02 OCT 2006 11157 S AKT OR ?AKT () ONCOGENE? () PROTEIN? OR AKT () KINASE () TRAN L1383 S L1 () INHIBIT? L217 S L2 AND REVIEW/DT L38 S L3 AND CANCER L4 => s 13 not 14

Updated Search

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SOURCE:

0 HYPERINSULINISUM?

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L7 1 L4 AND INSULIN?

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ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1211155 HCAPLUS

DOCUMENT NUMBER: 144:16324

The Akt/PKB pathway: molecular target for TITLE:

cancer drug discovery

Cheng, Jin Q.; Lindsley, Craig W.; Cheng, George Z.; AUTHOR (S):

Yang, Hua; Nicosia, Santo V.

Departments of Pathology and Interdisciplinary CORPORATE SOURCE:

> Oncology, H Lee Moffitt Cancer Center and Research Institute, University of South Florida College of

Medicine, Tampa, FL, 33612, USA Oncogene (2005), 24(50), 7482-7492

CODEN: ONCNES; ISSN: 0950-9232 Nature Publishing Group

PUBLISHER: DOCUMENT TYPE:

Journal; General Review

English LANGUAGE:

A review. The serine/threonine kinase Akt/PKB pathway presents an exciting new target for mol. therapeutics, as it functions as a cardinal nodal point for transducing extracellular (growth factor and insulin) and intracellular (receptor tyrosine kinases, Ras and Src) oncogenic signals. In addition, alterations of the Akt pathway have been detected in a number of human malignancies. Ectopic expression of Akt, especially constitutively activated Akt, is sufficient to induce oncogenic transformation of cells and tumor formation in transgenic mice as well as chemoresistance. Akt has a wide range of downstream targets that regulate tumor-associated cell processes such as cell growth, cell cycle progression, survival, migration, epithelial-mesenchymal transition and angiogenesis. Blockage of Akt signaling results in apoptosis and growth inhibition of tumor cells with elevated Akt. The observed dependence of certain tumors on Akt signaling for survival and growth has wide implications for cancer therapy, offering the potential for preferential tumor cell killing. In the last several years, through combinatorial chemical, high-throughput and virtual screening, and traditional medicinal chemical, a number of inhibitors of the Akt pathway have been identified. This review focuses on ongoing translational efforts to therapeutically target the Akt pathway.

REFERENCE COUNT:

THERE ARE 131 CITED REFERENCES AVAILABLE FOR 131 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'HCAPLUS' ENTERED AT 17:54:03 ON 02 OCT 2006

11157 S AKT OR ?AKT () ONCOGENE? () PROTEIN? OR AKT () KINASE () TRAN L1

383 S L1 () INHIBIT? L_2

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              8 S L3 AND CANCER
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              9 S L3 NOT L4
              0 S L5 AND HYPERINSULINISUM?
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              1 S L4 AND INSULIN?
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             7 L4 NOT L7
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             9 L5 NOT L7
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        434770 DISORDER?
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             O L9 AND HYPERPROLIFERATIVE (W) DISORDER?
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         34518 ANGIOGENESIS?
             1 L9 AND ANGIOGENESIS?
L11
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L11 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2004:1003474 HCAPLUS
DOCUMENT NUMBER:
                         142:168720
TITLE:
                         Canstatin, a endogenous inhibitor of
                         angiogenesis and tumor growth
                         Su, Ying; Zhu, Jian-si
AUTHOR (S):
                         Institute of Cancer Research, Nan Hua University,
CORPORATE SOURCE:
                         Hengyang, 421001, Peop. Rep. China
                         Chinese Journal of Cancer Research (2004), 16(3),
SOURCE:
                         229-234
                         CODEN: CJCRFH; ISSN: 1000-9604
                         Chinese Journal of Cancer Research
PUBLISHER:
                         Journal; General Review
DOCUMENT TYPE:
LANGUAGE:
                         English
                Canstatin is a novel inhibitor of angiogenesis and
     tumor growth, derived from the C-terminal globular non-collageneous (NCI)
     domain of the \alpha 2 chain of type IV collagen. It inhibits endothelial
     cell proliferation and migration in a dose-dependent manner, and induces
     endothelial cell apoptosis. In vivo expts. show that canstatin
     significantly inhibits solid tumor growth. The canstatin mediated
     inhibition of tumor is related to apoptosis. Canstatin- induced apoptosis
     is associated with phosphatidylinositol 3-kinase/Akt
     inhibition and is dependent upon signaling events transduced
     trough membrane death receptor.
                               THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         20
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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FILE 'REGISTRY' ENTERED AT 17:52:01 ON 02 OCT 2006

FILE 'HCAPLUS' ENTERED AT 17:54:03 ON 02 OCT 2006

Updated Search

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            383 S L1 () INHIBIT?
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             17 S L2 AND REVIEW/DT
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              0 S L5 AND HYPERINSULINISUM?
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              1 S L4 AND INSULIN?
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             8 L9 NOT L11
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          7776 RESTENOSIS?
             0 L12 AND RESTENOSIS?
L13
=> s 112 and inflammation?
        159606 INFLAMMATION?
L14
             0 L12 AND INFLAMMATION?
=> s 112 and autoimmune?
         48030 AUTOIMMUNE?
L15
             0 L12 AND AUTOIMMUNE?
=> s 112 and allergy?
         44675 ALLERGY?
L16
             0 L12 AND ALLERGY?
=> s 112 and asthma?
         33692 ASTHMA?
L17
             0 L12 AND ASTHMA?
=> d l12, ibib abs hitstr, 1-8
L12 ANSWER 1 OF 8
                   HCAPLUS
                            COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2006:488600 HCAPLUS
                         Phosphoinositide 3-kinase/Akt signaling pathway and
TITLE:
                         its therapeutical implications for human acute myeloid
                         leukemia
                         Martelli, A. M.; Nyakern, M.; Tabellini, G.; Bortul,
AUTHOR (S):
                         R.; Tazzari, P. L.; Evangelisti, C.; Cocco, L.
CORPORATE SOURCE:
                         Cell Signalling Laboratory, Dipartimento di Scienze
                         Anatomiche Umane e Fisiopatologia dell'Apparato
                         Locomotore, Sezione di Anatomia Umana, Universita di
                         Bologna, Bologna, Italy
SOURCE:
                         Leukemia (2006), 20(6), 911-928
                         CODEN: LEUKED; ISSN: 0887-6924
PUBLISHER:
                         Nature Publishing Group
DOCUMENT TYPE:
                         Journal; General Review
LANGUAGE:
                         English
     The phosphoinositide 3-kinase (PI3K)/Akt signaling pathway is crucial to
     many aspects of cell growth, survival and apoptosis, and its constitutive
     activation has been implicated in the both the pathogenesis and the
     progression of a wide variety of neoplasias. Hence, this pathway is an
     attractive target for the development of novel anticancer strategies.
```

Recent studies showed that PI3K/Akt signaling is frequently activated in

acute myeloid leukemia (AML) patient blasts and strongly contributes to proliferation, survival and drug resistance of these cells. Upregulation of the PI3K/Akt network in AML may be due to several reasons, including FLT3, Ras or c-Kit mutations. Small mols. designed to selectively target key components of this signal transduction cascade induce apoptosis and/or markedly increase conventional drug sensitivity of AML blasts in vitro. Thus, inhibitory mols. are currently being developed for clin. use either as single agents or in combination with conventional therapies. However, the PI3K/Akt pathway is important for many physiol. cellular functions and, in particular, for insulin signaling, so that its blockade in vivo might cause severe systemic side effects. In this review, we summarize the existing knowledge about PI3K/Akt signaling in AML cells and we examine the rationale for targeting this fundamental signal transduction network by means of selective pharmacol. inhibitors.

REFERENCE COUNT:

250 THERE ARE 250 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1234702 HCAPLUS

DOCUMENT NUMBER: 145:116355

TITLE: Deguelin as a chemopreventive agent in mouse lung

tumorigenesis induced by tobacco smoke carcinogens

AUTHOR(S): Hecht, Stephen S.

CORPORATE SOURCE: The Cancer Center, University of Minnesota, Minn., MN,

55455, USA

SOURCE: Journal of the National Cancer Institute (2005),

97(22), 1634-1635

CODEN: JNCIEQ; ISSN: 0027-8874

PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. The research of Lee et al. (2005) entitled "Chemopreventive effects of deguelin, a novel Akt inhibitor, on tobacco-induced lung tumorigenesis" is reviewed with commentary and refs. The study by these authors showed that in mouse models, deguelin decreased the expression of pAkt in lungs and inhibited lung tumorigenesis induced by the tobacco smoke carcinogen benzo[a]pyrene (BAP) and 4(-methylnitrosamino)-1-(3-pyridyl)-1-butanone (NKK). The effects were particularly striking considering the relatively low dose of deguelin (4 mg/kg, twice a day) used in the chemoprevention study. Deguelin was effective when administered at the same time as BAP plus NKK or when given after carcinogen administration. An innovative aspect of this study was the use of microcomputed tomog. image anal. to detect lung tumors in live mice.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1068675 HCAPLUS

DOCUMENT NUMBER: 144:120596

TITLE: Accelerating lead development by microwave-enhanced

medicinal chemistry

AUTHOR(S): Shipe, William D.; Wolkenberg, Scott E.; Lindsley,

Craig W.

CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Research

Laboratories, West Point, PA, 19486, USA

SOURCE: Drug Discovery Today: Technologies (2005), 2(2),

155-161

CODEN: DDTTB5; ISSN: 1740-6749

URL: http://www.sciencedirect.com/science/journal/1740

Elsevier B.V. PUBLISHER:

DOCUMENT TYPE: Journal; General Review; (online computer

file)

LANGUAGE: English

A review. Microwave-assisted organic synthesis (MAOS) addresses the need for AB accelerated chemical synthesis by providing many advantages over classical thermal conditions. Microwave instruments produced by Biotage, CEM and Milestone enable chemical to be safely and reproducibly performed on various scales and in a parallel fashion. To illustrate the high utility of this technol. for lead development, our Akt kinase program will be described wherein MAOS played a pivotal role in the identification of

isoenzyme-selective Akt inhibitors.

REFERENCE COUNT: THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS 29 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:329631 HCAPLUS

DOCUMENT NUMBER: 142:456149

TITLE: Inhibitors of β -amyloid-induced toxicity by

modulating the Akt signaling pathway

AUTHOR (S): Nakagami, Yasuhiro

CORPORATE SOURCE: Biological Research Laboratories, Sankyo Co., Ltd.,

Tokyo, 140-8710, Japan

SOURCE: Drug News & Perspectives (2004), 17(10), 655-660

CODEN: DNPEED; ISSN: 0214-0934

PUBLISHER: Prous Science

Journal; General Review DOCUMENT TYPE:

English LANGUAGE:

A review. The Akt signaling pathway plays a crucial role in neuronal survival, leading to inhibition of apoptosis. Many stimulants including neurotrophins are reported to activate this pathway in preclin. studies; however, there are no drugs for neurodegenerative diseases adopting such a

concept on the market so far. Among neurodegenerative diseases,

Alzheimer's disease is the most common and characterized by senile plaques

and neurofibrillary tangles, which consist of β -amyloid and

hyperphosphorylated tau, resp. Recent studies suggest that activation of

Akt inhibits toxicity of β-amyloid and formation of

neurofibrillary tangles, leading to protection of neurons against apoptosis. This review discusses the possibility of treatment of

Alzheimer's disease by activating the Akt signaling pathway.

THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 59 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

2004:475523 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 142:195821

TITLE: The molecular mechanisms regulating the

phosphorylation of the NADPH oxidase component p47phox

by phosphoinositide 3-kinase

AUTHOR (S): Yamamori, Tohru; Inanami, Osamu; Nagahata, Hajime;

Kuwabara, Mikinori

CORPORATE SOURCE: Lab. Radiat. Biol., Dep. Environ. Veterinary Sci.,

Grad. Sch. Veterinary Med., Hokkaido Univ., Sapporo,

060-0818, Japan

SOURCE: Jui Seikagaku (2003), 40(2), 63-76

CODEN: JSUEBY; ISSN: 1345-921X

PUBLISHER:

Jui Seikagakkai

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

Japanese

Superoxide production by NADPH oxidase is essential for the bactericidal properties of phagocytes. Phosphorylation of p47phox, one of the cytosolic components of NADPH oxidase, is a crucial step of the oxidase activation. Some evidences suggest that phosphoinositide 3-kinase (PI3K) is involved in p47phox phosphorylation, but it has not been fully understood how PI3K regulates it. The aim of this study was to examine the mechanism underlying the PI3K-regulation of p47phox phosphorylation. Pharmacol. inhibition of PI3K attenuated both fMLP-stimulated p47phox phosphorylation and NADPH oxidase activity in HL-60 cells differentiated to a neutrophil-like phenotype. Although fMLP elicited Akt activation in a PI3K-dependent manner, an Akt inhibitor had no effect on the oxidase activity triggered by fMLP. In vitro kinase assay revealed that Akt was unable to catalyze p47phox phosphorylation. Interestingly, the activation of cPKC and PKC after fMLP stimulation was dependent on PI3K. Furthermore, PI3K inhibitors reduced the activation of phospholipase Cy2 without affecting tyrosine phosphorylation on it. These results suggest that PI3K regulates the phosphorylation of NADPH oxidase component p47phox by controlling

L12 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

diacylglycerol-dependent PKCs but not Akt.

ACCESSION NUMBER:

2004:361502 HCAPLUS

DOCUMENT NUMBER:

141:306789

TITLE:

AUTHOR(S):

Anti apoptotic proteins as targets of chemotherapy

Smitha, V. B.; Ruby, John Anto

CORPORATE SOURCE:

Division of Cancer Biology, Rajiv Gandhi Centre for

Biotechnology, Thiruvananthapuram, 695014, India

SOURCE:

Amala Research Bulletin (2003), 23, 1-6

CODEN: ARBMCS; ISSN: 0971-4987

PUBLISHER:

Amala Cancer Research Centre

DOCUMENT TYPE:

Journal: General Review

LANGUAGE:

English

A review focuses on different anti-apoptotic mols. over-expressed by

various tumors and their role in regulating the effectiveness of antitumor

chemotherapy. It describes NF-κB; Bcl-2; Akt; inhibitor of apoptosis; and heat shock protein.

REFERENCE COUNT:

45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:453335 HCAPLUS

DOCUMENT NUMBER:

139:225909

TITLE:

Decisions on life and death: FOXO forkhead

transcription factors are in command when PKB/Akt is

off duty

AUTHOR(S):

Burgering, Boudewijn M. T.; Medema, Rene H.

CORPORATE SOURCE:

Department of Physiological Chemistry and Center for

Biomedical Genetics, University Medical Center

Utrecht, Neth.

SOURCE:

Journal of Leukocyte Biology (2003), 73(6), 689-701

CODEN: JLBIE7; ISSN: 0741-5400

PUBLISHER:

Federation of American Societies for Experimental

Biology

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

Forkhead transcription factors of the FOXO family are important

downstream targets of protein kinase B (PKB)/Akt, a kinase shown to play a decisive role in cell proliferation and cell survival. Direct phosphorylation by PKB/Akt inhibits transcriptional activation by FOXO factors, causing their displacement from the nucleus into the cytoplasm. Work from recent years has shown that this family of transcription factors regulates the expression of a number of genes that are crucial for the proliferative status of a cell, as well as a number of genes involved in programmed cell death. As such, these transcription factors appear to play an essential role in many of the effects of PKB/Akt on cell proliferation and survival. Indeed, in cells of the hematopoietic system, mere activation of a FOXO factor is sufficient to activate a variety of proapoptotic genes and to trigger apoptosis. In contrast, in most other cell types, activation of FOXO blocks cellular proliferation and drives cells into a quiescent state. In such cell types, FOXO factors also provide the protective mechanisms that are requires to adapt to the altered metabolic state of quiescent cells. Thus, as PKB/Akt signaling is switched off, FOXO factors take over to determine the fate of a cell, long-term survival in a quiescent state, or programmed cell death. This review summarizes our current understanding of the mechanisms by which PKB/Akt and FOXO factors regulate these decisions.

REFERENCE COUNT:

101 THERE ARE 101 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:446535 HCAPLUS

DOCUMENT NUMBER: 139:63860

TITLE: Akt inhibits DNA damage by

suppressing p73, p53, Forkhead or all three?

AUTHOR(S): Basu, Subham

CORPORATE SOURCE: Signal Transduction Lab., Cancer Res., UK

SOURCE: Cell Cycle (2003), 2(2), 69-70

CODEN: CCEYAS; ISSN: 1538-4101

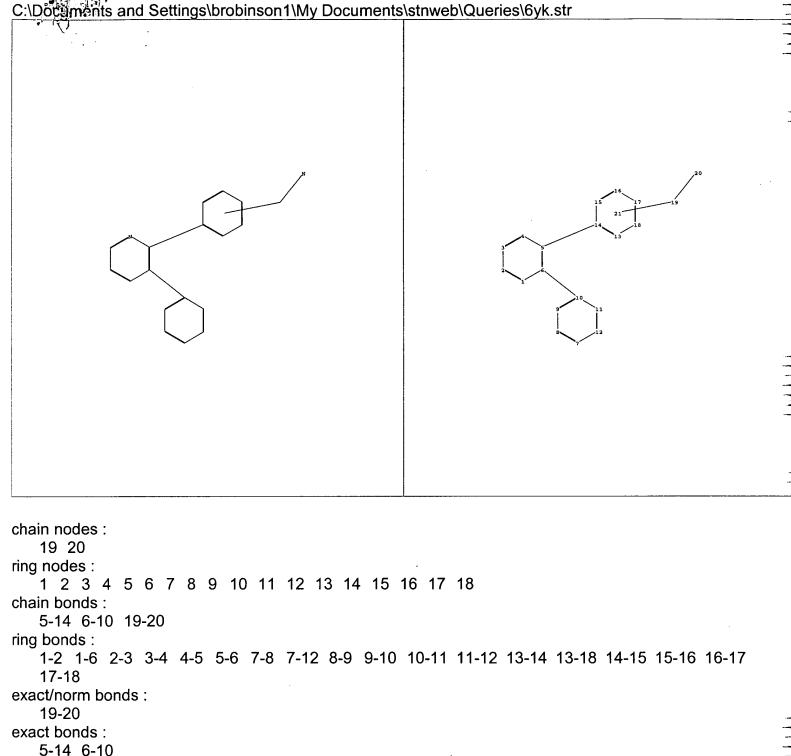
PUBLISHER: Landes Bioscience

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AR A review discusses Akt regulation of DNA damage by suppression of transcription through p73, p53 and Forkhead. Recent data suggest that Akt regulation of p73-dependent DNA-damage is mediated primarily through YAP (Yes-associated protein), while Akt regulation of p53-dependent cell death is mediated through MDM2. Depending on the nature of the pro-apoptotic stimuli, DNA damaging or otherwise, the various Akt targets are possibly not only differentially regulated, as demonstrated by p53 and p73, but the same target may signal contrary effects, as seems to be the case for Forkhead. In an actual in vivo scenario, such as in a transformed cell that has evaded apoptosis by increasing Akt activity, the overall picture is probably generated by the coordinated regulation of a number of substrates, including but not limited to p53, p73 and Forkhead transcription factors.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



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17-18

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isolated ring systems:

containing 1: 7: 13:

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1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17

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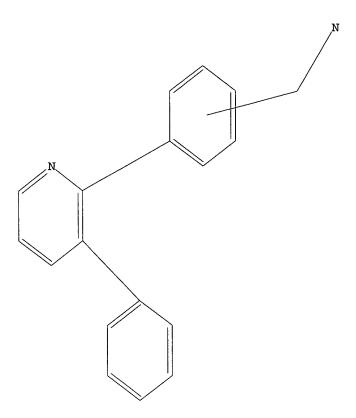
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L6 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:86368 HCAPLUS

DOCUMENT NUMBER: 142:211437

TITLE: Discovery of 2,3,5-trisubstituted pyridine derivatives

as potent Akt1 and Akt2 dual inhibitors

AUTHOR(S): Zhao, Zhijian; Leister, William H.; Robinson, Ronald

G.; Barnett, Stanley F.; Defeo-Jones, Deborah; Jones, Raymond E.; Hartman, George D.; Huff, Joel R.; Huber,

Hans E.; Duggan, Mark E.; Lindsley, Craig W.

CORPORATE SOURCE: Department of Medicinal Chemistry, Technology Enabled

Synthesis Group, Merck Research Laboratories, Merck &

Co., West Point, PA, 19486, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),

15(4), 905-909

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:211437

AB This letter describes the discovery of a novel series of dual Akt1/Akt2 kinase inhibitors, based on a 2,3,5-trisubstituted pyridine scaffold. Compds. from this series, which contain a 5-tetrazolyl moiety, exhibit

more potent inhibition of Akt2 than Akt1.

IT 790659-59-5P 790659-68-6P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);

PREP (Preparation); USES (Uses)

(preparation of 2,3,5-trisubstituted pyridine derivs. as potent Akt1/Akt2 dual inhibitors)

RN 790659-59-5 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[[4-(1,2,3-thiadiazol-4-yl)phenyl]methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 790659-68-6 HCAPLUS

CN Benzenemethanamine, N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]-4-(1,2,3-thiadiazol-4-yl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:964999 HCAPLUS

DOCUMENT NUMBER: 141:406038

TITLE: Substituted pyridine compounds as inhibitors of

protein kinase Akt activity for treating cancer

INVENTOR(S): Duggan, Mark E.; Lindsley, Craig W.; Wu,

Zhicai; Zhao, Zhijian; Hartnett, John C.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

activity for treating cancer)

RN 790659-74-4 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[[4-(1,2,3-thiadiazol-4yl)phenyl]methyl]amino]methyl]phenyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-59-5 CMF C28 H21 N5 S

CM 2

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10554187
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CRN 76-05-1 CMF C2 H F3 O2

IT790659-59-5P 790659-60-8P 790659-61-9P 790659-62-0P 790659-63-1P 790659-64-2P 790659-65-3P 790659-66-4P 790659-67-5P 790659-68-6P 790659-69-7P 790659-70-0P 790659-71-1P 790659-72-2P 790659-73-3P 790659-75-5P 790659-76-6P 790659-77-7P 790659-78-8P 790659-79-9P 790659-80-2P 790659-81-3P 790659-82-4P 790659-83-5P 790659-84-6P RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (substituted pyridine compds. as inhibitors of protein kinase Akt activity for treating cancer) RN790659-59-5 HCAPLUS CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[[4-(1,2,3-thiadiazol-4yl)phenyl]methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 790659-60-8 HCAPLUS
CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[(1S,2R)-2-phenylcyclopropyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 790659-61-9 HCAPLUS

3-Pyridinecarbonitrile, 6-[4-[[[(3,4-difluorophenyl)methyl]amino]methyl]phenyl]-5-phenyl- (9CI) (CA INDEX NAME)

CN

RN 790659-62-0 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[[2-(3-fluorophenyl)ethyl]amino]methyl]pheny l]-5-phenyl- (9CI) (CA INDEX NAME)

RN 790659-63-1 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[[2-(4-fluorophenyl)ethyl]amino]methyl]pheny l]-5-phenyl- (9CI) (CA INDEX NAME)

RN 790659-64-2 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[(4-phenyl-2-morpholinyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 790659-65-3 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[[4-(phenylmethyl)-2-morpholinyl]methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} \\ \hline \\ \text{Ph-} & \text{CH}_2 \\ \hline \end{array} \\ \text{NH-} & \text{CH}_2 \\ \hline \end{array} \\ \text{CH} \\ \end{array}$$

RN 790659-66-4 HCAPLUS
CN 3-Pyridinecarbonitrile, 6-[4-[[methyl](1-phenyl-1H-pyrazol-4-yl)methyl]amino]methyl]phenyl]-5-phenyl- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 790659-67-5 HCAPLUS
CN 2-Pyrrolidineethanamine, 1-methyl-N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \\ N \\ N \\ & \text{N} \end{array}$$

RN 790659-68-6 HCAPLUS

CN Benzenemethanamine, N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]-4-(1,2,3-thiadiazol-4-yl)- (9CI) (CA INDEX NAME)

RN 790659-69-7 HCAPLUS

CN Benzenemethanamine, 3,4-difluoro-N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

RN 790659-70-0 HCAPLUS

CN 3-Pyridinecarbonitrile, 2-chloro-5-phenyl-6-[4-[[[[4-(1,2,3-thiadiazol-4-yl)phenyl]methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 790659-71-1 HCAPLUS

CN 1-Propanone, 1-(2-aminophenyl)-3-[[[4-[5-(5-amino-1,3,4-thiadiazol-2-yl)-3-phenyl-2-pyridinyl]phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

RN 790659-72-2 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[(3-oxo-3-phenylpropyl)amino]methyl]phenyl]-5-phenyl- (9CI) (CA INDEX NAME)

NC
$$CH_2-NH-CH_2-CH_2-C-Ph$$

RN 790659-73-3 HCAPLUS

CN 1-Propanone, 3-[[[4-[5-(5-amino-1,3,4-thiadiazol-2-yl)-3-phenyl-2-pyridinyl]phenyl]methyl]amino]-1-phenyl- (9CI) (CA INDEX NAME)

RN 790659-75-5 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[(1S,2R)-2-phenylcyclopropyl]amino]methyl]phenyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-60-8 CMF C28 H23 N3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-76-6 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[[(3,4-difluorophenyl)methyl]amino]methyl]ph enyl]-5-phenyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-61-9 CMF C26 H19 F2 N3

$$\begin{array}{c|c} & \text{Ph} \\ \hline \\ \text{CH}_2-\text{NH}-\text{CH}_2 \\ \hline \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-77-7 HCAPLUS

Updated Search

CN 3-Pyridinecarbonitrile, 6-[4-[[[2-(3-fluorophenyl)ethyl]amino]methyl]pheny l]-5-phenyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-62-0 CMF C27 H22 F N3

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-78-8 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[[2-(4-fluorophenyl)ethyl]amino]methyl]pheny l]-5-phenyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-63-1 CMF C27 H22 F N3

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-79-9 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[(4-phenyl-2-morpholinyl)methyl]amino]methyl]phenyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-64-2 CMF C30 H28 N4 O

$$\begin{array}{c|c} & \text{Ph} \\ \hline \\ \text{Ph} & \text{CH}_2-\text{NH-CH}_2 \\ \hline \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-80-2 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[[4-(phenylmethyl)-2-morpholinyl]methyl]amino]methyl]phenyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-65-3 CMF C31 H30 N4 O

$$\begin{array}{c|c} & \text{Ph} \\ \hline \\ \text{Ph-} & \text{CH}_2 \\ \end{array} \\ \text{NH-} & \text{CH}_2 \\ \end{array} \\ \begin{array}{c|c} & \text{Ph} \\ \hline \\ & \text{CN} \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-81-3 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[methyl[(1-phenyl-1H-pyrazol-4-yl)methyl]amino]methyl]phenyl]-5-phenyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-66-4 CMF C30 H25 N5

PAGE 1-A

PAGE 2-A

ĊN

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-82-4 HCAPLUS

CN 2-Pyrrolidineethanamine, 1-methyl-N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

HINNE SALES THE RESIDENCE SHOULD BE SHOULD BE

CM 1

CRN 790659-67-5 CMF C26 H29 N7

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CN

RN 790659-83-5 HCAPLUS

Benzenemethanamine, N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]-4-(1,2,3-thiadiazol-4-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-68-6 CMF C28 H22 N8 S CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-84-6 HCAPLUS

CN Benzenemethanamine, 3,4-difluoro-N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-69-7 CMF C26 H20 F2 N6

CM 2

CRN 76-05-1 CMF C2 H F3 O2

TT 790659-59-5D, salts, stereoisomers 790659-60-8D, salts, stereoisomers 790659-61-9D, salts, stereoisomers

Updated Search

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790659-62-0D, salts, stereoisomers 790659-63-1D, salts,
     stereoisomers 790659-64-2D, salts, stereoisomers
     790659-65-3D, salts, stereoisomers 790659-66-4D, salts,
     stereoisomers 790659-67-5D, salts, stereoisomers
     790659-68-6D, salts, stereoisomers 790659-69-7D, salts,
     stereoisomers 790659-70-0D, salts, stereoisomers
     790659-71-1D, salts, stereoisomers 790659-72-2D, salts,
     stereoisomers 790659-73-3D, salts, stereoisomers
     790659-85-7 790659-86-8
    RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (substituted pyridine compds. as inhibitors of protein kinase Akt
       activity for treating cancer)
RN
     790659-59-5 HCAPLUS
CN
     3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[[4-(1,2,3-thiadiazol-4-
     yl)phenyl]methyl]amino]methyl]phenyl]- (9CI)
                                                   (CA INDEX NAME)
```

RN 790659-60-8 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[(1S,2R)-2phenylcyclopropyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 790659-61-9 HCAPLUS

3-Pyridinecarbonitrile, 6-[4-[[[(3,4-difluorophenyl)methyl]amino]methyl]phenyl]-5-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Ph} \\ \text{CH}_2-\text{NH}-\text{CH}_2 \\ \end{array}$$

RN 790659-62-0 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[[2-(3-fluorophenyl)ethyl]amino]methyl]pheny

CN

1]-5-phenyl- (9CI) (CA INDEX NAME)

RN 790659-63-1 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[[2-(4-fluorophenyl)ethyl]amino]methyl]pheny l]-5-phenyl- (9CI) (CA INDEX NAME)

RN 790659-64-2 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[(4-phenyl-2-morpholinyl)methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 790659-65-3 HCAPLUS

CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[[4-(phenylmethyl)-2-morpholinyl]methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} \\ \hline \\ \text{Ph-} & \text{CH}_2 \\ \end{array} \\ \text{NH-} & \text{CH}_2 \\ \end{array} \\ \begin{array}{c|c} & \text{Ph} \\ \hline \\ \text{CN} \\ \end{array}$$

RN 790659-66-4 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[methyl](1-phenyl-1H-pyrazol-4-yl)methyl]amino]methyl]phenyl]-5-phenyl- (9CI) (CA INDEX NAME)

PAGE 2-A

CN

RN 790659-67-5 HCAPLUS

CN 2-Pyrrolidineethanamine, 1-methyl-N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ N \\ N \\ N \\ H \end{array}$$

RN 790659-68-6 HCAPLUS

CN Benzenemethanamine, N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]-4-(1,2,3-thiadiazol-4-yl)- (9CI) (CA INDEX NAME)

RN 790659-69-7 HCAPLUS

CN Benzenemethanamine, 3,4-difluoro-N-[[4-[3-phenyl-5-(1H-tetrazol-5-yl)-2-pyridinyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

RN 790659-70-0 HCAPLUS

CN 3-Pyridinecarbonitrile, 2-chloro-5-phenyl-6-[4-[[[[4-(1,2,3-thiadiazol-4-yl)phenyl]methyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 790659-71-1 HCAPLUS

CN 1-Propanone, 1-(2-aminophenyl)-3-[[[4-[5-(5-amino-1,3,4-thiadiazol-2-yl)-3-phenyl-2-pyridinyl]phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ N & & & \\ & & & \\ H_2N & & & \\ & & & \\ Ph & & \\ \end{array}$$

RN 790659-72-2 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[4-[[(3-oxo-3-phenylpropyl)amino]methyl]phenyl]-5-phenyl- (9CI) (CA INDEX NAME)

NC
$$CH_2-NH-CH_2-CH_2-C-Ph$$

RN 790659-73-3 HCAPLUS

CN 1-Propanone, 3-[[[4-[5-(5-amino-1,3,4-thiadiazol-2-yl)-3-phenyl-2-pyridinyl]phenyl]methyl]amino]-1-phenyl- (9CI) (CA INDEX NAME)

RN 790659-85-7 HCAPLUS

CN 1-Propanone, 1-(2-aminophenyl)-3-[[[4-[5-(5-amino-1,3,4-thiadiazol-2-yl)-3-phenyl-2-pyridinyl]phenyl]methyl]amino]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-71-1 CMF C29 H26 N6 O S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 790659-86-8 HCAPLUS
CN 1-Propanone, 3-[[[4-[5-(5-amino-1,3,4-thiadiazol-2-yl)-3-phenyl-2-pyridinyl]phenyl]methyl]amino]-1-phenyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 790659-73-3 CMF C29 H25 N5 O S

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

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(FILE 'HOME' ENTERED AT 14:36:42 ON 02 OCT 2006)

FILE 'REGISTRY' ENTERED AT 14:39:04 ON 02 OCT 2006

L1 STRUCTURE UPLOADED

L2 1 S L1

L3 36 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 14:41:10 ON 02 OCT 2006

L4 4 S L3

L5 4 S L3/THU

L6 2 S L5 AND DUGGAN, M?/AU

=> s 15 not 16

L7 2 L5 NOT L6

=> s 17 and lindsley, c?/au

100 LINDSLEY, C?/AU

L8 0 L7 AND LINDSLEY, C?/AU

=> s 17 and wu, z?/au

10714 WU, Z?/AU

L9 0 L7 AND WU, Z?/AU

=> s 17 and zhao, z?/au

7927 ZHAO, Z?/AU

L10 0 L7 AND ZHAO, Z?/AU

=> s 17 and hartnett, j?/au

222 HARTNETT, J?/AU

L11 0 L7 AND HARTNETT, J?/AU

=> d 17, ibib abs hitstr, 1-2

L7 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:1288063 HCAPLUS

DOCUMENT NUMBER:

144:36364

TITLE:

Bicyclic compounds

INVENTOR(S):

Hirai, Miki; Kusama, Mari; Hosaka, Toshihiro; Kohnomi,

Shuntarou

PATENT ASSIGNEE(S):

Tanabe Seiyaku Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

Engilsi

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.						DATE		APPLICATION NO.					DATE				
	O 2005115984							Ī	WO 2	005-	JP10:	20050530						
,,,	W:	AE, CN, GE, LC,	AG, CO, GH, LK, NI,	AL, CR, GM, LR, NO,	AM, CU, HR, LS, NZ,	AT, CZ, HU, LT, OM,	AU, DE, ID, LU, PG, TN,	AZ, DK, IL, LV, PH,	DM, IN, MA, PL,	DZ, IS, MD, PT,	EC, JP, MG, RO,	EE, KE, MK, RU,	EG, KG, MN, SC,	ES, KM, MW, SD,	FI, KP, MX, SE,	GB, KR, MZ, SG,	GD, KZ, NA, SK,	
	RW:	BW, AZ, EE, RO,	BY, ES, SE,	GM, KG, FI, SI,	KZ, FR,	MD, GB, TR,	MW, RU, GR, BF,	TJ, HU,	TM, IE,	AT, IS,	BE, IT,	BG, LT,	CH, LU,	CY, MC,	CZ, NL,	DE, PL,	DK, PT,	
PRIORIT	10,	10			1	JP 2004-160660 JP 2004-191849 US 2004-584142P JP 2004-348136					A 20040629 P 20040701							

OTHER SOURCE(S):

MARPAT 144:36364

GΙ

Heterocyclic compds. I [Q = pyridine or pyrimidine; A = benzene or AB heteroarom. ring; G = ring B optionally substituted with R3, or amino optionally substituted by one or two selected from the group consisting of alkyl, aralkyl and cycloalkyl; ring B = benzene, heterocyclic ring, cycloalkane or cycloalkene; R1 = CON(R6)R5, CON(R6)OR5, CONHN(R6)R5, COON(R6)COR5, CON(R6)SO2R5, COR5, CO2R5, CN; R2 and R3 may be the same or different from each other, and each = CN, NO2, OH, alkoxy, halo, carboxyl, etc.; m = 0, 1 or 2; R4 = H, CN, OH, halo, alkoxy, carbamoyl, etc.; R5 and R6 may be the same or different from each other, and each = H, an optionally substituted alkyl, cycloalkyl, aryl, heterocyclic, alkoxycarbonyl, or R5 and R6 may form an optionally substituted heterocyclic ring in combination with atoms to which they are bonded] and pharmaceutically acceptable salt were prepared as calcium-activated K channel opener useful for treatment of pollakiuria, urinary incontinence, chronic obstructive lung disease and prophylaxis. Thus, compound II was prepared via heterocyclization reaction of III with Vilsmeier agent, and showed a relaxation effect on K-induced contraction of isolated urinary bladder.

Ι

IT 870723-07-2P 870723-08-3P 870723-09-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of heterocyclic compds. as calcium-activated K channel opener for treatment of pollakiuria, urinary incontinence, chronic obstructive lung disease and prophylaxis)

RN 870723-07-2 HCAPLUS

CN Benzamide, N-[(5-methylpyrazinyl)methyl]-4-(3-phenyl-2-pyridinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

$$\bigcap_{\text{Ph}}^{\text{N}} \bigcap_{\text{C-NH-CH}_2}^{\text{O}} \bigcap_{\text{N}}^{\text{N}} \bigcap_{\text{Me}}^{\text{N}}$$

● HCl

RN 870723-08-3 HCAPLUS

CN Benzamide, 4-(5-chloro-3-phenyl-2-pyridinyl)-N-[(2S)-2,3-dihydroxypropyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 870723-09-4 HCAPLUS

CN Benzamide, 4-(5-chloro-3-phenyl-2-pyridinyl)-N-[(5-methylpyrazinyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

L7 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:737516 HCAPLUS

DOCUMENT NUMBER: 139:257284

TITLE: Cathepsin cysteine protease inhibitors and their

therapeutic use

0 0 ∞ (a) 11€.

10554187

INVENTOR(S):
Bayly, Christopher I.; Black, Cameron; Leger, Serge;

Li, Chun Sing; McKay, Dan; Mellon, Christophe;

Gauthier, Jacques Yves; Lau, Cheuk; Therien, Michel; Truong, Vouy-Linh; Green, Michael J.; Hirschbein, Bernard L.; Janc, James W.; Palmer, James T.;

3

Baskaran, Chitra

PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.; Axys Pharmaceuticals,

Inc

SOURCE: PCT Int. Appl., 282 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

Engli

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.						KIND DATE						DATE						
	2003075836 2003075836										2003-1	20030228							
	W:	AE, CO,	AG, CR,	AL, CU,	AM, CZ,	AT, DE,	AU, DK,	AZ, DM,	DZ,	EC	, BG, , EE, , KG,	ES,	FI,	GB,	GD,	GE,	GH,		
		PT,	RO,	RU,	sc,	SD,		SG,	SK,	SL	, MX, , TJ,				-				
	RW:	KG,	KZ,	MD,	RU,	тJ,	TM,	AT,	BE,	ВG	, TZ, , CH, , NL,	CY,	CZ,	DE,	DK,	EE,	ES,		
	CA 2477657					CI, CM, GA, GN, AA 20030918 A1 20030922				CA :	2003-	2477	20030228						
US			A1 20031218				US 2003-377377 EP 2003-716238					20030228							
BR	R: 2003	IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, IT, , TR, 2003-	BG,	CZ,	EE,	HU,				
CN JP	CN 1638757 JP 2005526753						A 20050713 T2 20050908			CN 2003-805181 JP 2003-574112 US 2004-505796						20030228			
NO	US 2005240023 NO 2004004207 RIORITY APPLN. INFO.:									NO :	2004 - 2002 -	4207 3618	18P	:	2 P 2	0041 0020	004 305		
OMITED CO	AMILIED COLIDGE (O)					NDN# 120.25726				US 2002-408704P WO 2003-US6147						0020 0030			

OTHER SOURCE(S): MARPAT 139:257284

This invention relates to cysteine protease inhibitors

R7(D)nCR6R7NR8CR3R4C(:O)NHCR1R2CN (R1-4 = H, (substituted)C1-6-alkyl or

C2-6-alkenyl; R1 and R2 or R3 and R4 may be take together with the C atom
to which they are attached to form a (substituted)C3-8-cycloalkyl or
heterocyclic ring; R5 = H, (substituted)C1-6-alkyl; R6 =
(substituted)aryl, heteroaryl, C1-6-haloalkyl, arylalky, heteroarylalkyl;
D = (substituted)C1-3-alkyl, C2-3-alkenyl, C2-3-alkynyl, aryl, heteroaryl,
C3-8-cycloalkyl, heterocyclyl; R7 = H, (substituted)C1-6-alkyl,
C2-6-alkenyl, C2-6-alkynyl, C1-6-alkyloxy, etc.; R8 = H, C2-6-alkyl)
including but not limited to, inhibitors of cathepsins K, L, S and B.
These compds. are useful for treating diseases in which inhibition of bone
resorption is indicated, such as osteoporosis.

IT 603140-97-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

, a D

CN

10554187

(cathepsin cysteine protease inhibitors and their therapeutic use)

RN 603140-97-2 HCAPLUS

Pentanamide, 2-[[(1S)-1-[4-[5-chloro-3-[4-(methylsulfonyl)phenyl]-2-pyridinyl]phenyl]-2,2;2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

=> file caold
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL
ENTRY SESSION
SESSION

-3.00

-3.00

FILE 'CAOLD' ENTERED AT 14:42:25 ON 02 OCT 2006
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FILE COVERS 1907-1966 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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(FILE 'HOME' ENTERED AT 14:36:42 ON 02 OCT 2006)

FILE 'REGISTRY' ENTERED AT 14:39:04 ON 02 OCT 2006

L1 STRUCTURE UPLOADED

L2 1 S L1

L3 36 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 14:41:10 ON 02 OCT 2006

L4 4 S L3

L5 4 S L3/THU

L6 2 S L5 AND DUGGAN, M?/AU

L7 2 S L5 NOT L6

L8 0 S L7 AND LINDSLEY, C?/AU

L9 0 S L7 AND WU, Z?/AU

L10 0 S L7 AND ZHAO, Z?/AU

L11 0 S L7 AND HARTNETT, J?/AU

FILE 'CAOLD' ENTERED AT 14:42:25 ON 02 OCT 2006

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L12 0 L3